## GODDARD FLIGHT REPLICA GROUND TESTING TEST REQUEST

Test Request Revision: 1 Date Conducted:

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MSFC TEST REQUESTER MSFC TEST ENGINEER

Changes Since Last Test: Gasoline for fuel; revise sequence per below.

Special Instructions: none

Revision Summary: original – submitted 4/10/03

## **Test Conditions**

**Objectives:** Short Duration Test ( $P_c \sim 50$  psig, MR  $\sim 2.4$ )

Hardware: Injector S/N 001 (coated), chamber #3 (steel, no liner), steel nozzle (no liner), throat insert

Propellant Supply:

System	Fluid	Temp (F)	Pressure (psig)	Orifice Dia (in)	Flow rate (#/s)
Oxidizer	GOX	ambient	110 <i>(P4305)</i>	0.210	~ 0.060
Fuel	87 octane gasoline	ambient	95 <i>(P4501)</i>	0.042	~ 0.025

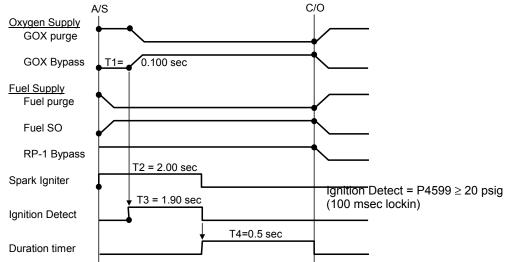
Redlines: (arm prior to A/S)

GOX Supply, P4305	HIGH = 130 psig	LOW = n/a
Fuel Supply, P4501	HIGH = 115 psig	LOW = 85 psig

Purge Supply:

System	Fluid	Temp (F)	Pressure (psig)	Orifice (in)
Oxidizer	GN2	ambient	100 <i>(P4261)</i>	0.070 dia
Fuel	GN2	ambient	100 <i>(P4225)</i>	0.0145 dia

Sequence:



(Duration timer should start at the end of the ignition detect or spark igniter timer, so that the total test duration is 2.5 sec, regardless of when ignition detect is achieved.)